

STATEMENT OF THE CLAIMS

1. – 32. (canceled)

33. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion having a bone contacting surface, an opposite surface, and a thickness therebetween, and defining,

i) a first plurality of first holes in said head portion, each of said first holes having its own single central axis extending through a ~~center~~ longitudinal centerline of said respective first hole ~~through an entirety of said thickness~~, and

ii) a second plurality of second holes in said head portion, each of said second holes having its own single central axis extending through a ~~center~~ longitudinal centerline of said respective second hole ~~through an entirety of said thickness~~, said second plurality of second holes distally displaced along said head portion relative to said first plurality of first holes,

wherein each of said central axes of said first plurality of first holes extend between and non-parallel relative to each of said central axes of said second plurality of second holes such that when said bone contacting surface is placed on the volar side of the distal radius, the central axes of said first plurality of first holes alternate in an interleaved arrangement with ~~and~~ second pluralities of ~~first and~~ second holes ~~are interleaved~~ below a bone contacting surface of said head portion and within the distal radius.

34. (cancelled)

35. (previously presented) A fracture fixation system according to claim 33, wherein:

said first holes are provided on a proximal side of a plane, said second holes are provided on a distal side of the plane, and said central axes of said first and second holes extend through said plane.

36. (previously presented) A fracture fixation system according to claim 33, wherein:

said first plurality includes at least three plate holes.

37. (previously presented) A fracture fixation system according to claim 33, wherein:

said second plurality includes at least three plate holes.

38. (previously presented) A fracture fixation system according to claim 33, wherein:

said head portion of said plate defines a tapered distal buttress, and said second plurality of second holes is provided in said buttress.

39. (previously presented) A fracture fixation system according to claim 33, further comprising:

a first plurality of pegs coupled to said plate at said first holes in alignment with said predefined central axes thereof.

40. (previously presented) A fracture fixation system according to claim 39, further comprising:

a second plurality of pegs coupled to said plate at said second holes in alignment with said predefined central axes thereof, said second plurality of pegs being interleaved relative to said first plurality of pegs.

41. (previously presented) A fracture fixation system according to claim 40, wherein:

at least one of said first and second pluralities of pegs includes a threaded shaft.

42. (previously presented) A fracture fixation system according to claim 33, wherein:

said first holes includes exactly two helical threads with respective entries offset by approximately 180°.

43. (previously presented) A fracture fixation system according to claim 42, wherein:

said second holes includes exactly two helical threads with respective entries offset by approximately 180°.

44. (previously presented) A fracture fixation system according to claim 43, further comprising:

projections coupled to said plate at said respective first and second holes in alignment with said predefined central axes thereof, said projections including a head provided with two helical threads having a first depth, said first and second holes each having a helical thread with a second depth, wherein said first depth is no more than one half said second depth.

45. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion, said head portion having a bone contacting surface, an opposite surface, and a thickness therebetween and defining,

i) a first plurality of first holes in said head portion each having its own single fixed central axis extending through a ~~center~~ longitudinal centerline of said respective first hole ~~along an entirety of said thickness~~, and

ii) a second plurality of second holes in said head portion, each having its own single fixed central axis extending through a ~~center~~ longitudinal centerline of said respective second hole ~~along an entirety of said thickness~~, said second plurality of second holes distally displaced along said head portion relative to said first plurality,

wherein said first holes are provided on a proximal side of a plane, said second holes are provided on a distal side of the plane, and said central axes of said first and second holes extend through said plane below a bone contacting surface of said distal head portion.

46. (previously presented) A fracture fixation system according to claim 45, wherein:

said central axes of said first holes are interleaved relative to said central axes of said second holes.

47. (previously presented) A fracture fixation system according to claim 45, wherein:

said first plurality includes at least three plate holes.

48. (previously presented) A fracture fixation system according to claim 47, wherein:

said second plurality includes at least three plate holes.

49. (previously presented) A fracture fixation system according to claim 45, wherein:

said head portion of said plate defines a tapered distal buttress, and said second plurality of second holes is provided in said buttress.

50. (previously presented) A fracture fixation system according to claim 45, further comprising:

a first plurality of pegs coupled to said plate at said first holes in alignment with said predefined central axes thereof.

51. (previously presented) A fracture fixation system according to claim 50, further comprising:

a second plurality of pegs coupled to said plate at said second holes in alignment with said predefined central axes thereof, said second plurality of pegs being interleaved relative to said first plurality of pegs.

52. (previously presented) A fracture fixation system according to claim 51, wherein:

at least one of said first and second pluralities of pegs includes a threaded shaft.

53. (previously presented) A fracture fixation system according to claim 45, wherein:

at least some of said first and second holes includes exactly two helical threads with respective entries offset by approximately 180°.

54. (previously presented) A fracture fixation system according to claim 53, wherein:

said plate is formed of a metal material and said metal material forming said plate is structured to define said first and second holes.

55. (previously presented) A fracture fixation system according to claim 54, further comprising:

projections coupled to said plate at said respective first and second holes in alignment with said predefined central axes thereof, said projections including a head provided with two helical threads having a first depth, said first and second holes each having a helical thread with a second depth, wherein said first depth is no more than one half said second depth.

56. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion having a bone contacting surface and defining,

i) a first plurality of first threaded holes in said head portion, each of said first threaded holes having its own single central axis defined by a longitudinal centerline extending through a center of a helical thread, and

ii) a second plurality of second holes in said head portion, each of said second holes having its own single central axis defined by a longitudinal centerline extending through a center of a helical thread, said second plurality of second holes distally displaced along said head portion relative to said first plurality of first holes,

wherein each of said central axes of said first plurality of first holes extend between and non-parallel relative to each of said central axes of said second plurality of second holes such that when said bone contacting surface is placed on the distal radius, the central axes of said first

plurality of first holes alternate in an interleaved arrangement with ~~and~~ second pluralities of first
~~and second holes are interleaved~~ below a bone contacting surface of said head portion and within
the distal radius.

57. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion having a bone contacting surface, an opposite surface, and a thickness therebetween, and defining,

i) a first plurality of first holes in said head portion, said first holes each having a cylindrical portion, each of said first holes having its own single central axis extending ~~longitudinally centrally~~ through a longitudinal centerline of its respective cylindrical portion, and

ii) a second plurality of second holes in said head portion, said second holes each having a cylindrical portion, each of said second holes having its own single central axis extending ~~longitudinally centrally~~ through a longitudinal centerline of its respective cylindrical portion, said second plurality of second holes distally displaced along said head portion relative to said first plurality of first holes,

wherein each of said central axes of said first plurality of first holes extend between and non-parallel relative to each of said central axes of said second plurality of second holes such that when said bone contacting surface is placed on the distal radius, the central axes of said first plurality of first holes alternate in an interleaved arrangement with ~~and~~ second pluralities of first
~~and second holes are interleaved~~ below a bone contacting surface of said head portion and within
the distal radius.

58. (currently amended) A fracture fixation system, comprising:

a) a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion defining,

i) a first plurality of first holes each having its own single predefined central axis through a longitudinal centerline of a respective first hole, and

ii) a second plurality of second holes each having its own single predefined central axis through a longitudinal centerline of a respective second hole, said second plurality distally displaced along said head portion relative to said first plurality,

wherein each of said central axes of said first plurality extend between and non-parallel relative to each of said central axes of said second plurality;

b) a first plurality of pegs coupled to said plate at said first holes in alignment with said predefined central axes thereof; and

c) a second plurality of pegs coupled to said plate at said second holes in alignment with said predefined central axes thereof, said second plurality of pegs being interleaved relative to said first plurality of pegs.

59. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion having a bone contacting surface and defining,

i) a first plurality of first threaded holes in said head portion, each of said first threaded holes having its own single central axis defined by a longitudinal centerline extending through a center of a helical thread, and

ii) a second plurality of second holes in said head portion, each of said second holes having its own single central axis defined by a longitudinal centerline extending through a center of a helical thread, said second plurality of second holes distally displaced along said head portion relative to said first plurality of first holes,

wherein said first holes are provided on a proximal side of a plane, said second holes are provided on a distal side of the plane, and said central axes of said first and second holes extend through said plane below a bone contacting surface of said distal head portion.

60. (currently amended) A fracture fixation system, comprising:

a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and said distal head portion having a bone contacting surface, an opposite surface, and a thickness therebetween, and defining,

i) a first plurality of first holes in said head portion, said first holes each having a cylindrical portion, each of said first holes having its own single central axis extending ~~longitudinally centrally~~ through a longitudinal centerline of its respective cylindrical portion, and

ii) a second plurality of second holes in said head portion, said second holes each having a cylindrical portion, each of said second holes having its own single central axis extending ~~longitudinally centrally~~ through a longitudinal centerline of its respective cylindrical portion,

said second plurality of second holes distally displaced along said head portion relative to said first plurality of first holes,

wherein said first holes are provided on a proximal side of a plane, said second holes are provided on a distal side of the plane, and said central axes of said first and second holes extend through said plane below a bone contacting surface of said distal head portion.

61. (currently amended) A fracture fixation system, comprising:

a) a substantially rigid plate sized for placement at a volar side of a distal radius bone, said plate including a proximal elongate body portion and a distal head portion at one end of the body portion, said distal head portion angled relative to said body portion and defining,

i) a first plurality of first holes each having its own single predefined central axis through a longitudinal centerline of a respective first hole, and

ii) a second plurality of second holes each having its own single predefined central axis through a longitudinal centerline of a respective second hole, said second plurality distally displaced along said head portion relative to said first plurality,

wherein said first holes are provided on a proximal side of a plane, said second holes are provided on a distal side of the plane, and said central axes of said first and second holes extend through said plane;

- b) a first plurality of pegs coupled to said plate at said first holes in alignment with said predefined central axes thereof; and
- c) a second plurality of pegs coupled to said plate at said second holes in alignment with said predefined central axes thereof, said second plurality of pegs being interleaved relative to said first plurality of pegs.

62. (new) A fracture fixation system according to claim 33, wherein:

when said bone contacting surface of said head portion of said plate is positioned on the volar side of the radius bone, all of said central axes of said first plurality of first holes project distally of said central axes of said second plurality of second holes within the radius bone.